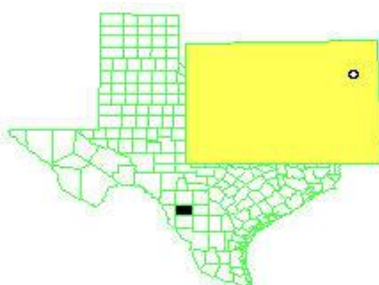


## CRYSTAL CITY AIRPORT

### TEXAS

EPA ID# TXD980864763

Site ID: 0602920



**EPA REGION 6**  
**CONGRESSIONAL DISTRICT 23**  
Zavala County

Other Names:  
Frank's Cropdusting Services

Contact: Ruben Moya  
214.665.2755

Last Updated: August 2012

## Background

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### **SITE UPDATES WILL BE DONE ON AN ANNUAL BASIS FOR THIS SITE**

The Crystal City Airport Site is located on 195.75 acres in Crystal City, Zavala County, Texas, as recorded in Book 51, pages 618 and 619 of the Zavala County Records. Property use to the north and southeast of the site is pasture land. A closed municipal landfill is located to the northeast of the property. A high school and an elementary school are located to the southwest of the site, and residential areas are located west and south of the site.

The population density in the area is low, and the local economy is dominated primarily by agriculture and oil and gas production. The source of drinking water for residents of Crystal City is the Carrizo Aquifer located 750 feet below ground surface. One municipal water supply well is located adjacent to the entrance to the airport, across the runway from the disposal cell (EPA, 1987, and EPA, 1995). This well is designated City water supply well no. 3.

The site was first used by the U. S. military during World War II as a detention facility. In 1949, the federal government deeded the property to the City of Crystal City. Since then, the property has been operated as a municipal airport. Beginning in the 1950s, several aerial pesticide application businesses began operating at the Crystal City Airport. Contamination at the site resulted from the improper waste handling practices of these businesses. By 1982, these operations ceased and the businesses declared bankruptcy, abandoning their equipment and deteriorated drums at the site.

## Current Status

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**A Fourth Five-Year Review was completed in FY 2011 and a protectiveness determination for the selected remedy was made in that it was determined that the remedy for the Crystal City Airport Site is protective of human health and the environment in the short term and will be protective long term, provided that site inspections, monitoring, mowing, and maintenance is performed and that the deed notice is observed .**

The contaminated soil at the Crystal City Airport site is contained within a capped cell facility; the perimeter of which is enclosed within a six-foot chain link fence that has posted warning signs. The capped cell facility is located in the city limits and is within the city owned tract of 120 acres of property.

Its general aesthetics appear to be well managed and maintained. Approximate 12,000 cubic yards of soil were excavated and placed in the consolidation cell. Texas Water Commission (TWC), now known as

Texas Commission in Environmental Quality (TCEQ), and EPA made the final inspection on September 25, 1990. The State of Texas took over O & M activities, which required annual water samples and analysis from a nearby municipal well.

The Site ground water is very deep in the range of 750 feet to 800 feet below ground surface (BGS) in the Carrizo Aquifer. The municipal water supply well is located adjacent to the airport. Annual water analysis was collected for possible site contaminants of arsenic, DDT and toxaphene. These contaminants were not detected in any of the numerous ground water samples taken on this municipal well in the initial RI/FS or in the five year reviews of record.

The Final RA Report was approved on June 6, 1991. In December 1991, the Site Close Out Report established that no further response actions were necessary at the site to protect human health and the environment. The first five-year review was finalized on March 7, 1995. At the time of the first five-year review, the remedy was found to be in good condition and operating as designed. The first five-year review found no deficiencies at the site and only recommended continued O&M activities. The Crystal Airport City Site was deleted from the NPL on March 23, 1995. The second five-year review was finalized on September 4, 2001, stated that the remedy continued to function as intended by the ROD and continues to be protective of human health and the environment. EPA has completed the third five-year review which was signed on May 15, 2006. Likewise, it established the remedy continues to function as intended by the ROD and be protective of human health and the environment.

## Benefits

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Several aerial pesticide applying businesses that operated at the airport from early 1950s until 1982 left surface principal pollutants at the Crystal City Superfund site which include arsenic compounds (1,450 ppm) and pesticides, specifically DDT (2,400 ppm) and toxaphene (1,100 ppm). Approximately 12,000 cubic yards of contaminated material wastes has been removed by verification monitoring that is now consolidated in the onsite vault.

Additional construction decontamination and relocation of airport objectives include the with the contaminated soils acute health effects, prevent air quality, and to prevent waters.

### NPL LISTING HISTORY

Site HRS Score: 32.26  
Proposed Date: 10/05/84  
Final Date: 5/20/86  
NPL Update: No. 2

activities included building demolition, reconstruction facilities, and long-term prevention of direct contact to prevent chronic and significant deterioration to degradation to surface

## Site Assessment and Ranking

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## Site Description

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The site is located in Zavala County, Texas, and on the Northeast side of Crystal City, east of US 83, and

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north of FM 582

Population: The approximate 8,000 residents in Crystal City and near by communities.

Setting: Nearest residence is located within 300 ft, and the nearest drinking water well is within 300 ft.  
This Site is located on the airport property, which is owned by the Crystal City.  
The Site is near the local high school.  
Surface contamination consisted of pesticides, herbicides, and fungicides.  
Site was deleted from NPL on March 23, 1995.

Hydrogeology: 0-200 ft. clay layer with inter bedded sandstone, clay stone, and lignite lenses.  
Principal aquifer is at depth of approx. 750ft-800ft.

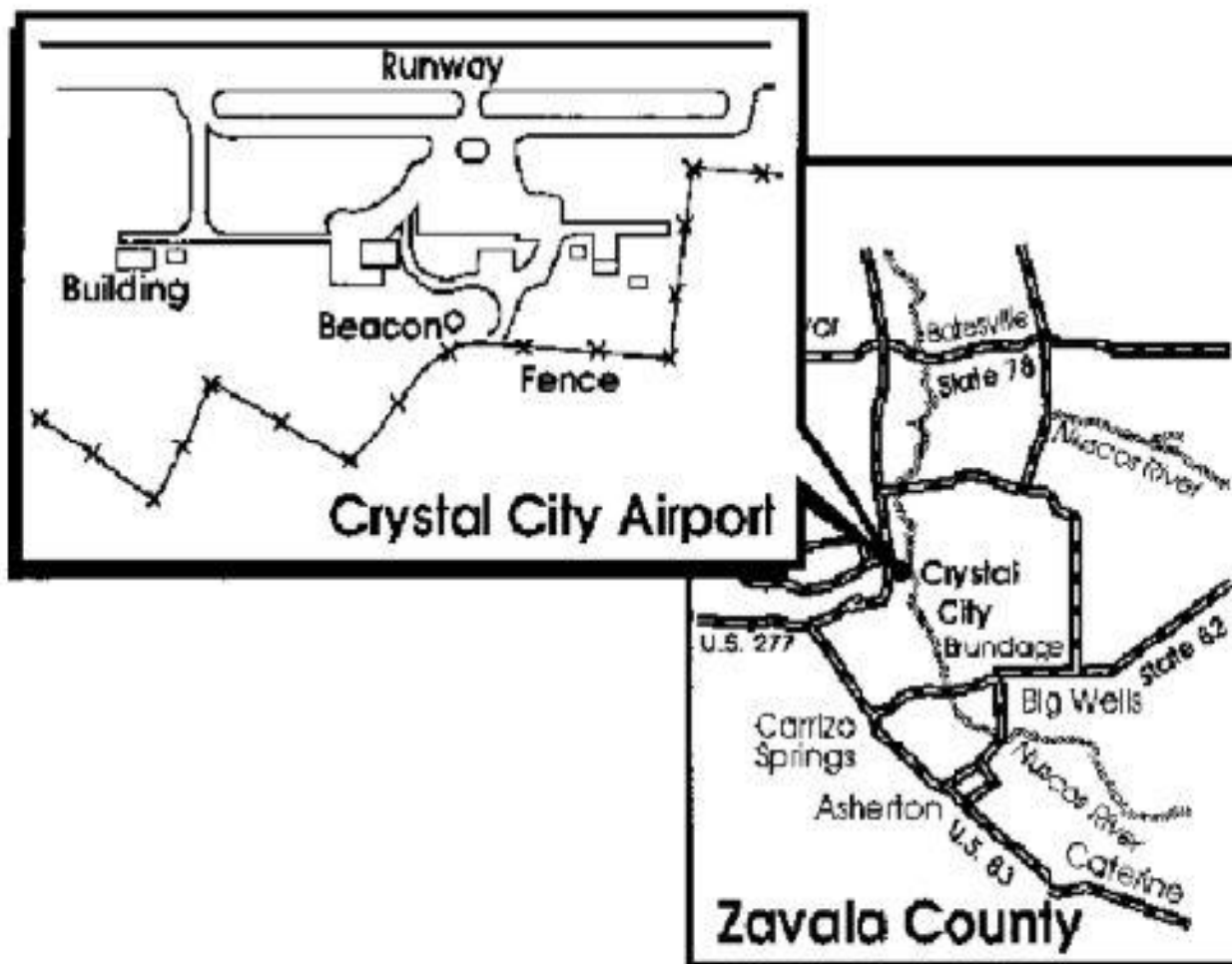
## Wastes and Volumes

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The principal pollutants at the Crystal City Superfund site include arsenic compounds (1,450 ppm) and pesticides, specifically DDT (2,400 ppm) and toxaphene (1,100 ppm).  
The volume of these wastes is approximately 12,000 cubic yards of contaminated material, which is consolidated in an onsite vault.

## Site Map and Diagram

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## The Remediation Process

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### Site History:

- Municipal Airport used for crop dusting properties until 1982.
- In October - November 1983, EPA repaired a dike and pumped most of the discharged sludges back into an onsite pit.
- April 1984, EPA consolidated 40 cubic yards of waste and approximately 70 drums in two onsite disposal cells.
- Airport is closed to the public in 1987.
- June 1988, EPA repaired the fence and posted warning signs.
- Use of airport facilities returned to Crystal City on 7/18/90 by the Texas Water Commission (TWC), currently known as the Texas Commission on Environmental Quality (TCEQ), after construction activities are completed.

### Health Considerations:

- Elevated levels of various pesticides and arsenic exceeded the health-based cleanup criteria of 100 parts per million (PPM) total pesticides.

### Other Environmental Risks:

- Location of nearest drinking water well is 300 ft.
- No ground water contamination observed.

### Soil Treatment:

- Onsite consolidation of all materials, which exceed health-based criteria of 100-ppm total pesticides.
- Placement of RCRA cap over consolidation cell.
- First Five-year review of remedy was conducted in March 7, 1995.
- Second five year review of the remedy was signed on 0 9/04/01

	<u>Other Remedies Considered</u>	<u>Reason Not Chosen</u>
1.	No Action	Exposure to hazardous waste is not reduced.
2.	Asphalt Cap	Not considered as effective as consolidation and capping with a RCRA cap.
3.	On-site Landfill with treatment	Increase vol. of material due to solidification with effectiveness similar to non-treatment remedies.
4.	Incineration	Ineffective for metals (arsenic).
5.	Offsite Disposal	Considered the least favored remedy by SARA.
6.	Fluid Extraction Unit	Unproven feasibility, implementability & reliability.

### Removal Activity (Interim Remedial Measures):

- In October - November 1983, EPA repaired a dike and pumped most of the discharged sludges Offsite.
- In April 1984, EPA consolidated 40 cubic yards of waste and approximately 70 drums in two onsite disposal cells.
  - June 1988, In October - November 1983, EPA repaired a dike and pumped most of the discharged sludges back into an onsite pit.
  - EPA repaired the fence and posted warning signs.
  - Access for construction was denied by City on June 14, 1989; city granted access on 11/22/89 pursuant to Unilateral Administrative Order (UAO) for access signed by Regional Administrator on

11/1/89.

- Onsite construction activities were complete July 1990.
- The Remedial Action (RA) phase was completed upon Regional approval of the closeout report on 12/27/91.

## Record of Decision

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Signed: September 29, 1987

## Community Involvement

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- Community Involvement Plan: Developed 11/86, revised 3/91
- Open houses and workshops: 10/84, 11/88, 1/90, weekly open house during Remedial Action.
- Original Proposed Plan Fact Sheet and Public Meeting: 11/88
- Original ROD Fact Sheet: 7/88
- Milestone Fact Sheets: 2/89, 11/89, 1/90, 2/90, 3/90, 4/90, 9/90, 1/91.
- Citizens on site mailing list: 80
- Constituency Interest: High interest; Congressional sub-committee hearings on remedy, 3/88.
- Citizen suit filed protesting selected remedy.
- Suit has been dismissed but may be refiled since remedy is complete.
- Outreach Activities are currently the responsibility of TNRCC. (Site is in state-lead operation and maintenance phase.)
- Site Repository: Crystal City Public Library, 101 East Dimmit Road, Crystal City, TX 78839
- Notice of Intent to Delete the site from the NPL was published in the Federal Register on 1/4/95; Public Comment Period ended on 2/6/95. Final deletion notice of deletion from NPL was published in Federal Register on March 23, 1995

## Technical Assistance Grant

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Availability Notice: 3/88

Letters of Intent Received: None

Grant Award: N/A

Current Status: No apparent citizen interest in grant.

## Contacts

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Remedial Project Manager (EPA):	Ruben Moya, 214-665-2755, Mail Code: 6SF-RA
State Contact: (TCEQ)	Barry Lands, 512/239-6547 Mail Code 136
Community Involvement (EPA):	Ruben Moya, 214-665-2755, Mail Code: 6SF-RA
Attorney (EPA):	Unassigned
State Coordinator (EPA):	Kathy Gibson, 214/665-7196, Mail Code : 6SF-VC
Regional Public Liaison (EPA):	Donn Walters, 214-665-6483 or 1-800-533-3508
Prime Contractor:	Qualtech, Inc. (Remedial Action)
Engineer:	EBASCO (Remedial Design & Remedial Action oversight)